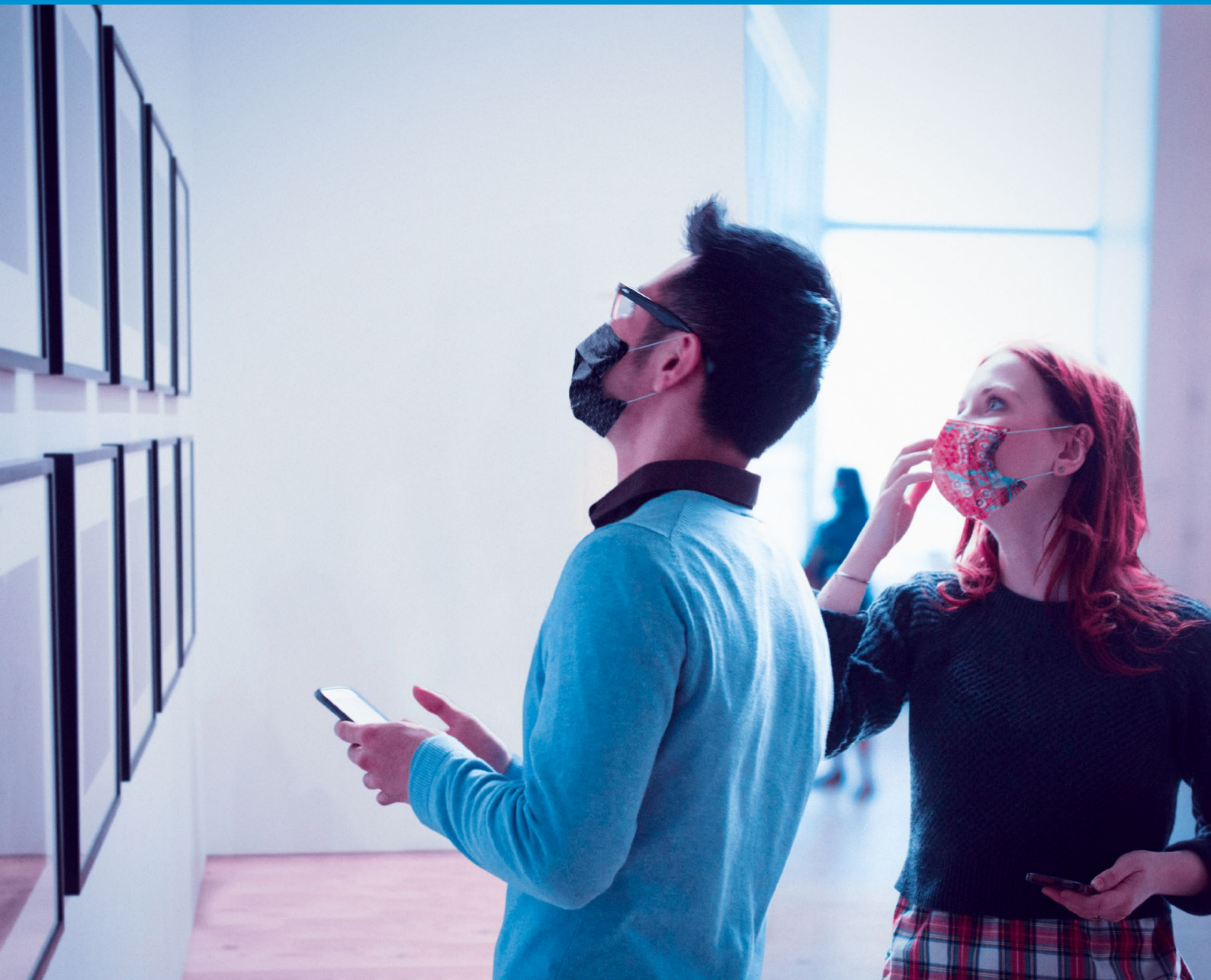


Digital renaissance

How Covid-19 has rebooted technology's role in the arts

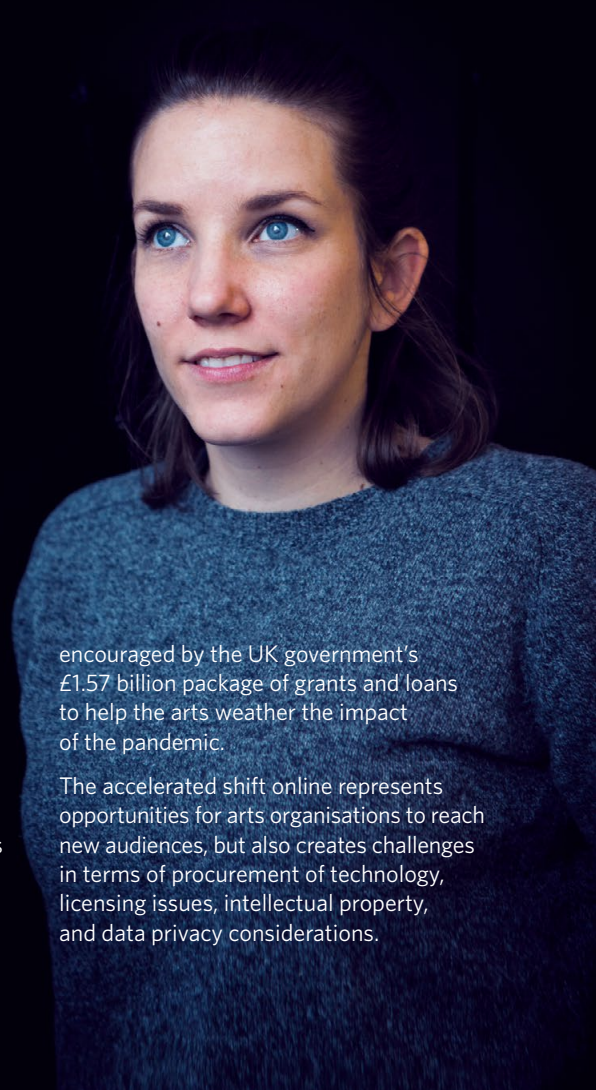


Digital renaissance

Introduction



As COVID-19 deters visitors from attending galleries, museums and art fairs, Fieldfisher speaks to industry experts **Bernadine Brocker Wieder** and **Joris Demnard** about the opportunities and obstacles of investing in new technology and offers practical insights on the legal issues organisations should consider.



In a sector traditionally reliant on in-person viewing experiences, Covid-19 represents a major test for the arts, culture and heritage industries.

Even as galleries and museums emerged from lockdown in late summer 2020, many were simultaneously transposing physical exhibitions into virtual spaces, in case visitors fail to return.

Collectors, meanwhile, have adjusted to browsing and buying through virtual galleries and auctions.

Some had already begun the digital transition pre-pandemic, investing in technologies such as virtual, augmented, and mixed reality (VR/AR/MR) platforms (collectively extended reality, or XR), while institutions previously reticent to adopt new technology have been

encouraged by the UK government's £1.57 billion package of grants and loans to help the arts weather the impact of the pandemic.

The accelerated shift online represents opportunities for arts organisations to reach new audiences, but also creates challenges in terms of procurement of technology, licensing issues, intellectual property, and data privacy considerations.

COVID-19 and the art world



Bernadine Brocker Wieder, founder and CEO of Vastari – an online platform connecting private collectors of art, exhibition producers, venues and museums for exhibition loans and tours – says the pandemic has had a major impact on the museum and gallery industry.

“Most museum websites were woefully underprepared to engage audiences online, as many considered their online presence as secondary to their physical venues,” she says.

“Having been forced to close for several months, museums have had to reopen with social distancing measures and restrictions that affect their bottom line.”

“With this fall in income, most galleries’ and museums’ exhibition calendars will almost certainly need to change completely. Instead of rotating exhibitions every three months, they might need to look at six-month cycles, or longer, and blockbuster events might have to be replaced, or alternated, with more intimate shows.”

Joris Demnard, founder and CEO of Ikonospace – a provider of solutions for art institutions to use 3D and virtual reality tools for exhibition design and marketing – agrees that the pandemic forced an abrupt change of direction for arts organisations.

“Covid-19 has been like an electric shock to the sector,” he says. “Ikonospace’s services and technologies went from ‘nice-to-have’ to ‘must-have’ for galleries to maintain contact with audiences while their doors were closed.”

Ikonospace offers a new way for art institutions and artists to display collections in a 3D environment, directly on their website, as well as VR/MR experiences.

“It provides an alternative to onsite experiences and caters to new audiences that might never have visited the physical spaces,” Demnard explains.

Since the start of the Covid-19 lockdown, Demnard says Ikonospace’s tools have become a central part of many galleries’ digital strategies.

As many small-to-medium sized galleries disappear, he believes it is essential that artists are given new opportunities to showcase their work.

“Museums also hide most of their collections in vaults, unreachable by the public or researchers, which XR can help address by making them accessible anytime, anywhere,” he adds.

Adapting to the new normal



In a context where galleries are having to drastically rethink their approach to generating income, **Brocker Wieder** says that Vastari's approach hasn't changed.

"But our role has become more important. It will take time for people to become comfortable again within indoor venues. Our platform allows institutions to assess the feasibility of a project and digitally travel the world looking for suitable partners."

She notes institutions also have to think carefully about their audience, relying less on tourists and doing more to appeal to local communities.

"Public institutions need the flexibility to face potential future lockdowns, and working with private collectors or producers of exhibitions offers more lenient terms than bureaucratic government-funded entities."

Demnard also believes that the threat of continued or fresh restrictions on accessing physical galleries is changing the way institutions think about how people access their exhibits.

"Cultural spaces are slowly reopening but the prospect of a future crisis still hangs over the sector and institutions don't want to get caught out again," he says.

"Today more than ever, those in the cultural sector should focus on these technologies to support their general strategies."

Ikonospace recently released the 'At Liebermanns' VR Experience in collaboration with the Stiftung Brandenburger Tor in Berlin. The experience reproduces the apartments and atelier of the celebrated impressionist artist Max Liebermann as they were before their destruction during World War 2. It is now a permanent addition to the premises, increasing ticket sales and attracting a new type of audience.

"The project allowed us to introduce this iconic character both through his art and his intimate setting and personal collection. It also allows his artworks and those of his contemporaries to be appreciated in their original context, which few technologies can recreate with such impact and realism," Demnard says.

Such projects, he believes, could become standard attractions at galleries and museums, with the right technological support.

Technology in action



The Dali Theatre-Museum

According to **Demnard**, the Covid-19 crisis has pushed many institutions that didn't have digital departments in the past to look much more seriously at digital solutions.

He notes that in 2020, for the first time, many if not most art fairs have offered digital alternatives to cancelling events and hundreds of museums have created virtual viewings and tours using web solutions such as video conference tools and 360 tours. Many art galleries and artists have also invested in their websites and social media strategy.

Brockler Wieder noticed differences in the approaches taken by some organisations to showcasing their exhibits remotely, with some adopting short-term tactics and others tackling the challenge in a more strategic way.

"Examples of short-term tactics included digital events via Zoom, a surge in social media posts and exhibitions on Google Arts & Culture. At the more strategic end of the scale, museums looked at the long-term implications of the lockdown and thought about lasting solutions. Some saw this as an opportunity for exhibitions to be digitalised, or to be digital-first, and engage curators in technological innovation," she says.

She highlights The National Gallery's incubator space, N G X, which focuses on developing augmented reality solutions to exhibit art, as well as collaborating with artists creating immersive experiences using AI, as an example of strategic thinking in the sector.

Brockler Wieder feels that Web 3.0 solutions for museums and galleries (including XR and AI) *"are not there yet"*, however she is excited about the future potential of digital exhibitions and digitalised exhibitions in the museum and gallery space.

"There is a difference – some exhibitions are made to be digital, and some are a digitalised version of an offline exhibition. There is also the digital made physical – exhibitions in digital media shown on site."

"Personal favourites among the digital exhibitions include the interactive features at the Art Institute of Chicago; tours of the Jewish Museum website; and the born-digital exhibitions at the Museum of Broken Relationships."

"Digitalised exhibitions that work well include the VR visits to the Thyssen Bornemisza Museum; 'Vida Americana' by the Whitney Museum; and the Matterport-enabled visit to the Dali Theatre-Museum."

"Great onsite digital exhibitions included 'Peach Garden' by Diversion Cinema a multi-player experience of the writings of a 16th century Korean poet; the multi-sensory, immersive, delicious and moving 'Ocean of Air' by Marshmallow Laser Feast; and Cao Fei's 'Blueprints' at the Serpentine Gallery, which included a great AR experience powered by Acute Art."

Bridging the knowledge gap

With many of these technologies and approaches still at a relatively early stage, choosing, procuring and learning how to use new digital tools can be a challenge, even for organisations that were well on their way to including digital offerings as part of their service before lockdown. According to **Denmark**:

“Every institution has different targets and goals and we’ve had to work hard to transfer our knowledge and help art institutions select the best medium for their needs,”

He also points out that a lack of familiarity with the technology can make it more difficult to understand what organisations want to achieve and what is proving most popular.

“Terms such as VR, AR, MR, XR and virtual exhibitions have been used in so many different ways that it is hard to really understand to what extent different solutions have been adopted,” he notes.

Brocker Wieder also sees knowledge, as well as interoperability issues, as potential barriers to arts organisations making the most of new technology.

“Most galleries and museums are unaware of what is possible with technology, which restricts their use of innovative solutions and consequently their reach and engagement. In general, the industry lacks the digital skills, experience and in some cases the ambition to take advantage of what is available them,” she says.

“In terms of the interoperability obstacle, datasets don’t always talk to each other which limits the growth of the digital ecosystem in arts and culture. You can see this in the roll-out of VR experiences – what’s built for one VR system won’t work for another.”



Choosing the right technology

Despite significant variation in the objectives of arts organisations, **Brocker Wieder** thinks it is “*much better*” for galleries and museums to use ‘off the shelf’ (OTS) products from external providers of technology for digitally showcasing collections, rather than to trying to reinvent the wheel.

“The technology is tried, tested and available on subscription for a fraction of the cost of building it yourself. This frees up the museum to focus on the stories and the content,” she says.

Demnard notes that the surge in demand for digital platforms caused by the Covid-19 lockdown increased competition among suppliers, driving greater innovation and quality.

However, he feels cost is still an issue for many. Costs vary depending on the choice of technology and the type of experiences an organisation wants to achieve.

Demnard says Ikonospace’s web galleries are made to be affordable to artists, starting only at a few hundred euros and a few thousand for galleries and museums that want to recreate one-to-one copies of their exhibition spaces.

Projects such as the ‘At Liebermanns’ VR Experience can reach budgets closer to a ‘real’ exhibition as they involve significant amounts of digitisation of 3D objects, voice acting, sound design, and custom development.

“The price and usability of VR headsets are only just becoming suitable for mass adoption,” Demnard says. *“MR is still only available by using 2D displays on phones, which is really just a tease of what the technology can offer. Apple is aiming to become a leader in this area and introduce its first augmented glasses in the next two years.”*

Demnard also admits that it is still expensive to digitise art collections.

“Photographs and videos are the only mediums that have translated fully to the digital form factor. Bringing a sculpture or installation into a 3D world takes a lot more effort and requires techniques such as 3D scanning and photogrammetry,” he says.

However, he notes that this is becoming cheaper and quicker to do every year and is supported by the introduction of new technologies such as AI that can create “very good” digital replicas of places or objects using only a few photographs.

Choosing the right technology continued

The future

When asked whether it makes commercial sense for galleries and museums to invest in VR/AR/MR technologies, **Brocker Wieder's** answer is an emphatic "yes".

"Any museum that ignores the importance of preparing for Web 3.0 is going to be obsolete in 15 years' time," she says.

She suggests that organisations can potentially offset the costs of investing in new technology by other efficiencies that arts organisations should be making to help them ride out the effects of the pandemic.

"Museums and galleries should focus on removing unnecessary costs while maintaining their role as educational research institutions. This will be tricky and different for every museum, but going back to their core function is a good place to start."

"They also need to programme must-see content optimised for social distancing – and view this as an opportunity, rather than a threat," she adds.

Demnard believes that Covid-19 will have an overall positive effect on modernising the art world.

"It took a catastrophe to shake old mind-sets that relied on tourism, ticket sales, and mass travel. Without the pandemic, it might have taken several more years to show that XR and 3D technologies are essential to this market."



Bernadine Brocker Wider

Founder and CEO, Vastari

+44 (0)20 7846 0088
info@vastari.com



Joris Demnard

Founder and CEO, Ikonospace

+31 6 40 11 7407
info@ikonospace.com

Moving art online

How can art organisations thrive in the digital environment?



Chris Eastham, Director in Fieldfisher's technology group, provides some tips on how to make the most of digital opportunities while avoiding the pitfalls.

Digital transformation

Be very clear from the outset what you are trying to achieve, and set out the business case for the project.

To make your digital transformation successful, make sure you can clearly explain the desired outcomes so that you can work with your project team and vendors to understand how to get there.

Once you have a clear understanding of your business case, you will need the right expertise to achieve your goals. Bernadine and Joris both highlighted the importance of knowledge transfer, and clear communications with vendors will be critical.

This requires having both the right vendor and the right knowledge to get the most out of your vendor. The vendor will (hopefully!) understand the technology but won't understand your business like you do, and complete reliance on the vendor may result in problems along the way.

Cost considerations

Organisations experienced in procuring technology recognise that there is a balance to be struck between cost, speed, and getting the optimum outcome. Decide early on which of these is the most important to your strategic objectives, and tailor your approach accordingly.

While a fully bespoke development can be attractive, consider whether an OTS solution may be appropriate, or could be modified to suit your needs.

Don't forget that open technologies can often reduce both acquisition costs and the total cost of ownership, as well as the delivery time.

Moving art online continued



Flexibility

Think about the future, and how to retain the flexibility to migrate to another vendor (or bring delivery in-house) if it becomes desirable.

When digitising artworks and moving your data into a solution, consider how easy it would be to retrieve and reuse that information; or, if you might find yourself 'locked-in' to a particular vendor or technology.

If it isn't all plain sailing, you need to be able to maintain a firm hand on the tiller. Sound governance mechanisms in contracts are preferable to relying on strict legal rights.

While a customer will always want to see appropriate legal remedies in the contract, it is usually better to be able to solve issues collaboratively along the way.

Good vendors tend to be open to this, and building transparency and co-operation into your relationship can help to solve issues before they become bigger problems.

Having appropriate mechanisms to control costs and timings will also really pay dividends.

IP and licences

If adopting a new platform, you will need to work out how it fits into your wider technology ecosystem. Some businesses have made expensive mistakes when integrating new solutions, and found themselves in hot water with pre-existing vendors. Think about who should own any newly-developed technology or materials, and why.

When translating physical exhibitions into a digital space, it is important to check you have rights to reproduce artworks in digital format.

While galleries may have permission to display physical artworks and reproduce them in sales brochures, those permissions may be limited by purpose, and additional rights may be necessary to create digital reproductions for exhibitions, etc. It is also important to ensure digital reproductions are of sufficient quality, and that fidelity to the original is retained.

Remember that artists have rights to object to derogatory treatment of their works, which could be triggered if there are problems with digitisation. It is also essential to think about ownership of the digital twin of the space.

Regulatory hurdles

We are increasingly living in a data-driven world, and the ability afforded by data to understand and interact with people in a personalised way is a powerful tool, and can substantially enhance the user experience.

But it is important to do this in the right way, and data privacy is a major consideration. It is important to be aware of what you can and cannot do, and how to go about it.

Implementing new technologies could make a wealth of new data available to you, which may include geo-location data, personal information obtained from social media accounts, profiling information about a user's preferences, and data from the user's device.

While it is possible to collect a vast amount of data, the principles of data protection law must be followed. We recommend limiting the data you store and process to what is necessary, not keeping data for longer than necessary (and thinking about how the retention of data is justified), and putting in place measures to safeguard any data that is collected, processed, or retained.

Moving art online continued

In some circumstances you may be able to rely on your legitimate interests for the processing of data, but in other cases appropriate consents may be required.

For any business, moving to the online world involves recognising and navigating regulation that galleries and museums haven't previously had to contend with to any great extent – and the compliance requirements may come as a surprise to some organisations.

Another factor to bear in mind is that the law changes frequently in this area, in an effort to keep pace with the rapid evolution of technology. It is important that organisations stay up to date.

The new P2B Regulation is one example of something that has affected the art world and that Fieldfisher has been advising on. More information on this can be found in our article: "[Digital opportunities for the art world](#)".

Consider the wider implications

Emerging technologies such as AI, XR, haptics, and IoT can be transformative when it comes to user experience, particularly when integrated in the physical space to blur lines between the physical and virtual worlds.

However, the practical, ethical, and legal implications are still not fully understood. There will need to be a careful assessment on a case-by-case basis to determine what issues are likely to arise, and how these can be addressed.

XR, for example, takes the real world and builds a virtual world in parallel that converges and interacts with it. However, just because interaction between the provider and the user is virtual, it doesn't mean that the provider can't be liable for real world effects.

We recommend checking whether imagery appears as intended on all relevant types of device – it is no good if it looks great on one but is distorted on another.

When images appear on the device, do they flicker or appear to flash or strobe? If so, appropriate warnings should be provided before the user is shown the image. If advertising a product, consider whether the depth of field of any 3D images used causes elements of the product to be enhanced or minimised. It is important to ensure that any potential distortion does not cause confusion or misperception amongst users about the advertised product.

Whether implementing new platforms, producing and distributing digital content, or marketing and selling goods and services online, we are constantly working with our clients to assess and resolve the legal issues, especially when it comes to new technologies.



Further information

For more information on how Fieldfisher can assist arts, heritage and cultural institutions with implementing new technologies, please contact **Chris Eastham, Helen Mulcahy, Brian Chadwick**, or visit the **Technology, Outsourcing and Privacy** pages on the Fieldfisher website.



Chris Eastham

Director, Technology, Privacy
and Outsourcing

+44 (0)20 7861 6795
chris.eastham@fieldfisher.com

Chris is a technology, outsourcing and privacy director at Fieldfisher with in-depth experience of AI, automation, robotics, AR/VR, and other emerging technologies.



Helen Mulcahy

Partner
Dispute Resolution

+44 (0)20 7861 4993
helen.mulcahy@fieldfisher.com

Helen is a dispute resolution partner at Fieldfisher with specialist experience in art matters.



Brian Chadwick

Partner
Corporate

+44 (0)20 7861 4822
brian.chadwick@fieldfisher.com

Brian is corporate partner at Fieldfisher with specialist knowledge in gaming technology. He also sits on the Advisory Council for the Tate Digital Committee.